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PATENT APPLICATION

**IN THE UNITED STATES PATENT AND TRADEMARK OFFICE
BEFORE THE BOARD OF PATENT APPEALS AND INTERFERENCES**

In re application of

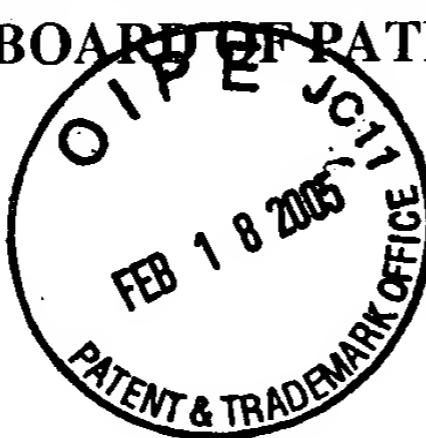
Yoshinori MIZUMURA

Appln. No.: 09/816,774

Confirmation No.: 5498

Filed: March 26, 2001

For: **METHOD OF USING A LUBRICATING MEMBER FOR FOOD-PROCESSING EQUIPMENT**



Docket No: Q63733

Group Art Unit: 1764

Examiner: Ellen M. McAvoy

SUBMISSION OF APPEAL BRIEF

MAIL STOP APPEAL BRIEF - PATENTS

Commissioner for Patents

P.O. Box 1450

Alexandria, VA 22313-1450

Sir:

Submitted herewith please find an Appeal Brief. A check for the statutory fee of \$500.00 is attached. The USPTO is directed and authorized to charge all required fees, except for the Issue Fee and the Publication Fee, to Deposit Account No. 19-4880. Please also credit any overpayments to said Deposit Account. A duplicate copy of this paper is attached.

Respectfully submitted,

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WASHINGTON OFFICE

23373

CUSTOMER NUMBER

Date: February 18, 2005

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APPEAL BRIEF UNDER 37 C.F.R. § 41.37

MAIL STOP APPEAL BRIEF - PATENTS

Commissioner for Patents
P.O. Box 1450
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Sir:

In accordance with the provisions of 37 C.F.R. § 41.37, Appellant submits the following:

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APPEAL BRIEF UNDER 37 C.F.R. §41.37
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I. REAL PARTY IN INTEREST

The real party in interest is Assignee NSK Ltd. of Tokyo, Japan, by way of an assignment recorded on July 5, 2001 at reel 011951, frame 0125.

II. RELATED APPEALS AND INTERFERENCES

There are no other prior or pending appeals, interferences or judicial proceedings known to Appellants, the Appellants' legal representative, or Assignee which may be related to, directly affect or be directly affected by or have a bearing on the Board's decision in the pending appeal.

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III. STATUS OF CLAIMS

Claims 1-7 have been rejected, and are the subject of this appeal.

IV. STATUS OF AMENDMENTS

On September 9, 2004, the Examiner issued a Final Office Action. Subsequent to the Final Office Action, Appellants filed a Response Under 37 C.F.R. § 1.116, but did not amend any of the claims. Accordingly, the claims stand as presented before the September 9 Final Office Action.

V. SUMMARY OF THE CLAIMED SUBJECT MATTER

One embodiment of the present invention, as set forth in independent claim 1, relates to a method of preparing a food-processing equipment lubricating member made of a polyolefin resin and a lubricant, and using the lubricating member at a temperature from the pour point of the lubricant to not higher than 70°C.

An FDA regulation concerning lubricants which have incidental contact with food limits the ultraviolet absorbance of such lubricants.¹ According to the present specification, "the lubricating member comprises as a base a resin that is said to be harmless to human beings and as a lubricant component a material that is harmless or less harmful to human beings. However, even such a lubricant member for food-processing equipment can have its base resin component eluted at raised operating temperatures. The resin component thus eluted can harm human beings."²

In the conventional case, the use of the lubricating member is not limited, so that it may be used at high temperatures and cause harm to human beings. In contrast, claim 1 sets forth a method in which the lubricating member is not used at temperatures of more than 70°C. Figs. 1 and 2 show graphs relating the temperature at which the lubricating member is used to its absorbance. As can be seen by the graphs, at temperatures of 70°C and less the lubricating member has an acceptable absorbance. At temperatures above 70°C, the absorbance

¹ Specification at page 3, lines 9 to 24.

² Specification at paragraph bridging pages 1 and 2. *See also* page 4, lines 7-17.

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dramatically increases to reach unsafe levels. Claim 1 sets forth a method of using the lubricating member at or below 70°C, thereby ensuring its safe operation.

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VI. GROUNDS OF REJECTION TO BE REVIEWED ON APPEAL

1st Ground of Rejection

The Examiner rejected claims 1-7 under 35 U.S.C. § 103(a) as being unpatentable over U.S. Patent No 6,119,813 to Yabe et al.

2nd Ground of Rejection

The Examiner rejected claims 1-7 under 35 U.S.C. § 103(a) as being unpatentable over published Japanese Patent Application 10-36875.

VII. ARGUMENT

1st Ground of Rejection

The Examiner rejected claims 1-7 under 35 U.S.C. § 103(a) as being unpatentable over U.S. Patent No 6,119,813 to Yabe et al. (hereinafter Yabe). Appellants respectfully traverse this rejection because Yabe fails to teach or suggest all the elements as set forth in the claims.

Yabe fails to teach or suggest all the elements as set forth in the claims. Yet, to establish *prima facie* obviousness of a claimed invention, all the claim limitations must be taught or suggested by the prior art.³

Claim 1 sets forth a method of using a lubricating member. First, the lubricating member is prepared of a polyolefin resin and a lubricant. The prepared lubricating member is then used at a temperature in the range of the pour point of the lubricant to not higher than 70°C. Fig. 2 illustrates that the relationship of the absorbance of the lubricating member changes with temperature. At temperatures of 70°C and lower, the lubricating member exhibits an absorbance of 0.8 or less and therefore conforms to FDA regulations. At higher temperatures, the absorbance of the lubricant increases to levels that do not conform to FDA regulations.⁴

Yabe fails to disclose the above-noted problem or an operating temperature limit. Although it is not necessary for Yabe to disclose the same problem, the lack of recognition of the problem is evidence that one of ordinary skill in the art following the teaching of Yabe would not

³ *In re Royka*, 490 F.2d 981, 180 USPQ 580 (CCPA 1974).

⁴ Specification at page 4, 1st full paragraph.

have come up with the same solution as the Appellants; i.e., because Yabe does not recognize the problem, it does not teach or suggest a solution to the problem

In response to Appellants' arguments that Yabe does not teach or suggest an operating temperature limit, the Examiner asserts that the lubricating member in Yabe may be used in food processing machines, that it is not clear from Yabe that food processing machines normally are operated at temperatures higher than 70°C and that it appears from the Yabe disclosure that the food processing machines would be used at room temperature.⁵

None of the Examiner's assertions establish *prima facie* obviousness. As noted above, to establish *prima facie* obviousness of a claimed invention, all the claim limitations must be taught or suggested by the prior art.⁶ The Examiner asserts that Yabe does not specifically teach operating above 70°C. However, this is not equivalent to Yabe teaching or suggesting a method in which a lubricating member is limited to use at 70°C and below. Instead Yabe's silence about what temperatures at which a lubricating member is used means that nothing is taught or suggested by Yabe regarding a temperature limitation. Silence does not imply the temperature limitation of claim 1.

The Examiner also asserts that the disclosure and examples in Yabe suggest that it may be used at room temperature. The Examiner, however, did not identify any examples in the Yabe disclosure which would give an indication of the temperature range at which the

⁵ September 9 Final Office Action at page 2, 4th full paragraph

⁶ *In re Royka*, 490 F.2d 981, 180 USPQ 580 (CCPA 1974).

lubricating member in Yabe is used. Additionally, Appellants do not believe that Yabe gives any examples indicating a temperature range in which the lubricating member is used.

Appellants believe that the Examiner may consider that Yabe inherently discloses the claimed temperature range. However, the fact that a certain result or characteristic may occur or be present in the prior art is not sufficient to establish the inherency of that result or characteristic.⁷ “In relying upon the theory of inherency, the examiner must provide a basis in fact and/or technical reasoning to reasonably support the determination that the allegedly inherent characteristic necessarily flows from the teachings of the applied prior art.”⁸ The Examiner has not provided sufficient basis to establish that Yabe inherently teaches the temperature limitation and Appellants also argue that Yabe would not operate within the temperature limitation.

Appellants submit that the lubricant in Yabe would operate at temperatures above 70°C even if the food processor was used in a room at room temperature. The Examiner asserts that a food processor would work at room temperature. However, the Examiner fails to account for the operating temperature of the food processor in an area in which the lubricating member is disposed. The lubricating member is located in an area with moving parts and friction. The operation of the moving parts and friction heat up the surrounding areas, and thus the lubricating member. Yabe specifically recognizes that frictional heat is produced and that such heat

⁷ *In re Rijckaert*, 9 F.3d 1531, 1534, 28 USPQ2d 1955, 1957 (Fed Cir. 1993).

⁸ *Ex parte Levy*, 17 USPQ2d 1461, 1464 (Bd. Pat. App. & Inter. 1990) (emphasis in original).

influences the lubricant.² Therefore, if the operating temperature of the lubricating member is not limited, the lubricating member could be heated above 70°C. Also, food processors perform heating processes such as boiling, baking, frying and crisping. All of these processes serve to heat up the food processing device. Since the lubricating member would be located in a portion of the food processor near where these heating processes take place, the heating processes would heat up the lubricating member as well. Therefore, although a food processor is placed in a room at room temperature, one of ordinary skill in the art would recognize that the internal parts of the food processor would operate above room temperature. As Appellants have argued, Yabe fails to teach or suggest any temperature limitation, does not inherently teach a temperature limitation and would in fact not operate using the claimed temperature limitation.

For at least any of the above reasons, Yabe fails to render obvious claims 1-7.

2nd Ground of Rejection

The Examiner rejected claims 1-7 under 35 U.S.C. § 103(a) as being unpatentable over published Japanese Patent Application 10-36875 (hereinafter JP ‘875). Appellants respectfully traverse this rejection because JP ‘875 fails to teach or suggest all the elements as set forth in the claims.

The Examiner rejected claims 1-7 as being unpatentable over JP’ 875 for reasons similar to those given for the rejection based on Yabe discussed above. Appellants therefore traverse the rejection of claims 1-7 based on JP ‘875 for reasons similar to those given above with respect to

² See Yabe at col. 7, lines 53-64.

Yabe. First, JP '875 is silent as to the temperature at which the lubricating member works. Since it does not recognize the problems associated with using the lubricating member at high temperatures it does not teach or suggest any temperature limitation regarding the use of the lubricating member. For *prima facie* obviousness, all the claim limitations must be taught or suggested.

Additionally, Appellants submit that the lubricating member of JP '875 used in a food processing machine would be used at temperatures above 70°C. As discussed above, the lubricating member would be subjected to increased heat by both friction and by heating processes associated with the food processing machine.

For at least the above reasons, JP '875 also fails to render claims 1-7 obvious. Accordingly, Appellants respectfully request that the Board of Patent Appeals and Interferences reverse this rejection.

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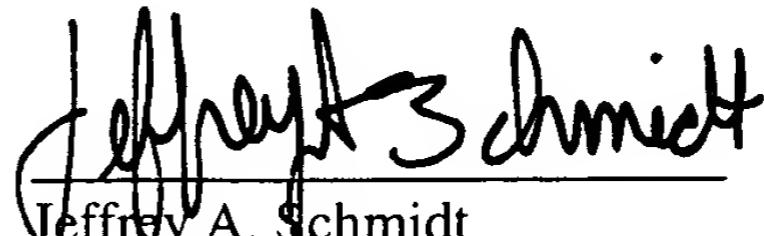
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Conclusion

Unless a check is submitted herewith for the fee required under 37 C.F.R. §41.37(a) and 1.17(c), please charge said fee to Deposit Account No. 19-4880.

The USPTO is directed and authorized to charge all required fees, except for the Issue Fee and the Publication Fee, to Deposit Account No. 19-4880. Please also credit any overpayments to said Deposit Account.

Respectfully submitted,



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CLAIMS APPENDIX

CLAIMS 1-7 ON APPEAL:

1. A method of using a lubricating member for food-processing equipment, said method comprising:

preparing a food-processing equipment lubricating member made of a polyolefin resin and a lubricant; and

using said lubricating member at a temperature in the range from the pour point of said lubricant to not higher than 70°C.

2. The method according to claim 1, wherein said lubricating member comprises a polyolefin resin and a liquid paraffin.

3. The method according to claim 2, wherein said lubricating member comprises 30% by weight of said polyolefin resin and 70% by weight of said liquid paraffin.

4. The method according to claim 1, wherein said the lubricant is selected from the group consisting of liquid paraffin, poly- α -olefin oil, vegetable oil, animal oil, grease for food-processing equipment, and lubricant for food-processing equipment.

5. The method according to claim 1, wherein the ratio of said lubricant to said polyolefin resin is in the range from 10:90 to 90:10 by weight.

6. The method according to claim 1, wherein said polyolefin resin is selected from the group consisting of polyethylene, polypropylene and polymethylpentene.

7. The method according to claim 4, wherein said polyolefin resin is selected from the group consisting of polyethylene, polypropylene and polymethylpentene.

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EVIDENCE APPENDIX:

There has been no evidence submitted pursuant to 37 C.F.R. §§ 1.130, 1.131, or 1.132 or any other similar evidence.

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RELATED PROCEEDINGS APPENDIX

There are no related proceedings.